Table A.4.16. East Yard AOC 29 Summary of Boring Log and Analytical Data

Boring/ Date/ Report	Total Depth of Boring	Depth to Water[1]	Lithologic Description[2] (Observation Notes)	Maximum PID Response, ppm_v (Depth)	Sample Type[3]	Sample ID (Depth)	Analyses[4]	COC Concentrations Greater Than Delineation Criteria
S1332/ MW155 9/4/02 AOC 29	9	9	Fill: 0-9 (slag and tar at 2-2.5; LNAPL sheen at 3-6; black tar at 6-9)	800	NAPL	S1332C1 (4-4.5)	GC Fingerprint	Diesel: 27000 mg/kg
					Water	MW155 (10/31/02)	V, S	**Benzene: 2J ug/L**
S1333/ MW156 9/4/02 AOC 29	9	9.5	Fill: 0-9.5 (LNAPL sheen at 2-4; wood in tip of spoon at 4'; slag and LNAPL sheen at 4-4.5; black tar at 4.5-9.5)	298	NAPL	S1333C1 (4-4.5)	GC Fingerprint	Diesel: 12000 mg/kg
					Water	MW156 (10/31/02)	V, S	**Benzene: 4J ug/L** Naphthalene: 470J ug/L Carbazole: 11 ug/L
SB0173 12/15/95 1st Soils (AOC 6B)	7	4.5	Fill: 0-7: Asphalt/sand (black staining at 4-5; black product/petroleum saturated/black NAPL at 4-7)	0		SB0173C (4-6)	TPH GC Fingerprint	Evaporated crude oil
RW94 5/30/01	12	6	Fill: 0-11: asphalt/sands/fly ash (fly ash globules of black liquid, strong odor, sheen at 6-11) Organic clay : 11-12	104 (3-4)				LNAPL present (0 to 0.01)
HP-0118 1st Groundwater (AOC 6B)	12	4	See SB0173	116		HP0118	V, S, M	1-methylnapthalene: 790 ug/L Phenanthrene: 250 ug/L Antimony: 40.5 ug/L Arsenic: 740 ug/L Cadmium: 18.2 ug/L Chromium: 101 ug/L Lead: 1830 ug/L Mercury: 6.67 ug/L Nickel: 247 ug/L Vanadium: 171 ug/L
H0549 7/10/00 CA00-3 QR (AOC 29)	8	4	Fill: 0-8: clayey sand/sand clay/fly ash (stained black at 3-8; fly ash saturated with black liquid, odor, asphalt tile at 6-8)	129 (7-8)				LNAPL present (0.05 thick)
H0548 7/10/00 CA00-3 QR (AOC 29)	12	2.5	Fill: 0-12: Clayey sand/coal tar/fly ash/coal tar-like material (stained black, odor at 2-2.5; black coal tar at 2.5-4; stained black, saturated with black liquid at 6-8; coal tar-like material at 9-12)	140 (7-8)				LNAPL present (0.10 thick)

H0547 7/10/00 CA00-3 Q.R. (AOC 29)	10	5	Fill: 0-10: Clay/sand/fly ash/asphaltic tile (stained with black tar-like material at 3-4; stained black, saturated with black liquid at 6-9	91 (6-7)	LNAPL	H0547	GC fingerprint	LNAPL present (0.16 thick) Weathered #2 diesel fuel or a refinery intermediate of equivalent carbon range.
H0388 9/15/99 2nd OWSS (AOC 16/EY4)	12	4	Fill: 0-11: Sands/fly ash (fly ash globules of black liquid, odor at 6-11) Clay with sands: 11-12	67 (7-8)	Water	H0388	V, S, M	**Benzene: 39 ug/L** Antimony: 164 ug/L Arsenic: 461 ug/L Cadmium: 81.3 ug/Ll Chromium (total) 210 ug/L Lead: 1850 ug/L Nickel: 196 ug/L Selenium: 70.5 ug/L Vanadium: 165 ug/L
H0387 9/15/99 2nd OWSS (AOC 16/EY4)	12	3	Fill: 0-11 Sands/fly ash (fly ash globules of black liquid, odor at 6-11) Clay with sands: 11-12	104 (3-4)	Water	H0387	V, S, M	Arsenic: 40.5 ug/L Lead: 56.9 ug/L
H0386 9/15/99 2nd OWSS (AOC 16/EY4)	12	4	Fill: 0-11: Sands/fly ash (fly ash globules of black liquid, strong odor at 6-11) Clay with Sands: 11-12	246 (10-11)	Water	H0386	V, S, M	Arsenic: 46.9 ug/L Lead: 16.5 ug/L
EY4TP19 10/29/01 LNAPL (EY4)	8	5	Fill: 0-8: sand/fly ash/asphalt like material at 6.5-8	32 (5-6)	None			LNAPL not observed
EY4TP18 10/29/01 LNAPL (EY4)	16	5	Fill: 0-15: sands/fly ash/silty clay/asphalt like material at 7-12 Organic clay at 15-16	52 (5-6)	None			LNAPL not observed
EY4TP17 10/29/01 LNAPL (EY4)	16	5	Fill: 0-13 Organic clay: 13-16	30 (6-7)	None			LNAPL not observed
EY4TP16 10/26/01 LNAPL (EY4)	12	6	Fill: 0-12: asphalt/sands/fly ash/sands/fly ash Meadow mat: 12	98 (7-8)	None			LNAPL not observed
EY4TP12 8/9/00 LNAPL (EY4)	12	4	Fill: 0-11: asphalt/gravels with sands/sands/fly ash (fly ash globules of black liquid, strong odor at 6-11) Clay with sands: 11-12	246 (10-11)	None			LNAPL present (0.03)

EY4TP11 8/9/00 LNAPL (EY4)	12	3	Fill: 0-11: Sands/fly ash (fly ash globules of black liquid, odor at 6-11) Clay with sands: 11-12	104 (3-4)	None			LNAPL present (0.32)
B31 (AOC 6B)								
B30 10/3/91 DRAI (AOC 6B)						B-30 (5-5.5)	TPH, V, S, M	TPH: 27000 mg/kg Arsenic: 220 mg/kg Copper: 930 mg/kg Lead: 420 mg/kg
						B30 (8.5-9)	TPH	None
						B30 (13-13.5)	TPH	None
A29TP9 1/31/02 LNAPL (AOC 29)	12	3.5	Fill: 0-12: sands/ black fly ash and sand/sands/sand, fly ash and woodchips	71 (4.5-7)	None			LNAPL present (0.33 thick)
A29TP8 10/29/01 LNAPL (AOC 29)	10	4	Fill: 0-10: sand/fly ash/silty clay/sands/asphalt like material at 8-10	42 (5-6)	None			LNAPL not observed
A29TP7 10/29/01 LNAPL (AOC 29)	11	7	Fill: 0-11: sand/asphalt like material at 3.5-11	2 (3-4)	None			LNAPL not observed
A29TP6 10/29/01 LNAPL (AOC 29)	12	3.5	Fill: 0-8: sands/fly ash/asphalt like material at 4-8 Clay: 8-12	20 (3-4)	None			LNAPL not observed
A29TP5 8/21/01 LNAPL (AOC 29)	10	4	Fill: 0-10: sand/fly ash and sand/asphalt like material at 6-6.5/silty sand	0	None			LNAPL not observed
A29TP4 4/2/01 LNAPL (AOC 29)	6	2	Fill: 0-6: sands/fly ash/ asphaltic tile at 4-6	0	None			LNAPL not observed
A29TP3 4/2/01 LNAPL (AOC 29)	8.5	4	Fill: 0-8.5: gravels and sands/sandy clay/fly ash and sands/asphaltic tile at 6-8 (black liquid at 4)	144 (4-5)	None			LNAPL present (0.31 thick)

A29TP2 4/2/01 LNAPL (AOC 29)	12	3	Fill: 0-11: clayey sands/fly ash and sands/asphaltic tile at 10-11 (sheen on water, petroleum odor at 4-10 Meadow mat: 11-12	27 (9)	None			LNAPL present (0.05 thick)
A29TP10 1/31/02 LNAPL (AOC 29)	12	3.5	Fill: 0-12: sands/fly ash and sand/sand/fly ash and sand/clay	120 (4-5)	None			LNAPL not observed
A29TP1 4/2/01 LNAPL (AOC 29)	9	3	Fill: 0-9: sands/fly ash and sands/asphaltic tile at 6-9 (petroleum odor at 3-6)	92 (4)	None			LNAPL present (coating on probe)
Transect 15					Sediment	SED15C (0-6)	V, S, M	Acenaphthylene: 0.15 mg/kg Acenaphthene: 0.04 mg/kg Fluorene: 0.053 mg/kg Phenanthrene: 0.36 mg/kg Anthracene: 0.3 mg/kg Fluoranthene: 1.1 mg/kg Pyrene: 1.4 mg/kg Benzo(a)anthracene: 0.65 mg/kg Chrysene: 0.94 mg/kg Benzo(k)fluoranthene: 0.44 mg/kg **Benzo(a)pyrene: 0.85 mg/kg** Indeno(1,2,3-ce)pyrene: 0.54 mg/kg Dibenz(a,h)anthracene: 0.15 mg/kg Benzo(g,h,i)perylene: 0.63 mg/kg Arsenic: 35.8 mg/kg Cadmium; 2.4J mg/kg Chromium: 134 mg/kg Copper: 302 mg/kg Lead: 230 mg/kg Mercury: 3.2 mg/kg Nickel: 52.3 mg/kg Silver: 5.2J mg/kg Zinc: 393 mg/kg
					Surface Water	SW15C (filtered)	V, S, M	None

NOTES:

Benzene and benzo(a)pyrene are highlighted in bold because they are indicator constituents of concern (COCs)

Shaded rows indicate samples collected from nearby SWMUs/AOCs

ppm_v = parts per million (volume basis)

All depths referenced on this summary table are in feet below the ground surface.

PID = Photoionization detector.

ID = Identifier.

mg/kg = milligrams per kilogram (equivalent to parts per million).

µg/L = micrograms per liter (equivalent to parts per million).

[1]Depth to water as observed during borehole advancement.

[2]"Fill" encountered within the completed borings was characteristically described as an asphalt layer (typical) underlain by a heterogeneous gravel to clay mixture of unconsolidated materials, ranging in color from tan to gray with occasional construction debris (e.g., brick) present. In some locations, the fill material is further characterized by containing a slag or beaded material, in which case it is noted within the table. Also noted on the table are any other olfactory or visual observations that indicate potential petroleum-type impacts within the fill unit were observed.

[3]P – property boundary, O – on-site, U – unsaturated, S – saturated, F – fill, N – native. "None" indicates that no sample was collected.

[4]V – VOCs, S – SVOCs, M – metals, Pb – lead, TOL – total organic lead, TEL – tetraethyl lead, TPH – Total Petroleum Hydrocarbons; SPLP -- Synthetic Precipitation Leaching Procedure; -Phys. Char. -- physical characteristics.